

Appl. No. : 09/935,789  
Filed : August 22, 2001

### REMARKS

In response to the Office Action, Applicant respectfully requests the Examiner to reconsider the above-captioned application in view of the foregoing amendments and the following comments.

#### Discussion of Allowable Subject Matter

In the Office Action, the Examiner stated that Claims 6 and 11-14 contain allowable subject matter. Claim 6 was objected to as being dependent upon a rejected base claim but would be allowable if rewritten in independent form including all of the limitation of the base claim and any intervening claims. Claims 11 and 13 would be allowable if rewritten to overcome the rejections under 35 U.S.C. § 112. Claims 12 and 14 would be allowable if rewritten to overcome the rejections under 35 U.S.C. § 112 and to include the limitations of the base claim and any intervening claims. By this paper, amendments have been made to overcome the objections to these claims and Claim 12 has been re-written into independent form (now Claims 12 and 20. Applicant notes that that the subject matter of base Claim 8 was inadvertently merged with another claim and this has been corrected by the above-amendments). Applicant notes that Claim 14 as originally presented was written in independent form and no specific objections were made to Claim 14 in the office action. Thus, Applicant respectfully submits that Claims 6 and 11-14 are now in condition for allowance.

#### Discussion of Objections to the Claims

In the Office Action, the Examiner objected to Claims 1, 7, 10-13 because of certain informalities. Applicant respectfully submits that this has been corrected by the above-amendments.

#### Discussion of Claim Rejections Under 35 U.S.C. § 102

In the Office Action, the Examiner rejected Claims 1 and 11-14 as being indefinite under 35 U.S.C. § 112, second paragraph. The Examiner stated that the limitation "Pareto-like" is indefinite. By this paper, Applicant has corrected the above-amendments to state "at least partly Pareto." Thus, at least part of the respective information should have Pareto characteristics or

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substantially similar equivalents. Thus, Applicant respectfully submits that the basis for this rejection has been overcome.

Discussion of Claim Rejections Under 35 U.S.C. § 102(a)

In the Office Action, the Examiner rejected Claims 1-5 and 7-10 under 35 U.S.C. § 102(a) as being anticipated by Francky Catthoor, et al., Proposal for Unified System Design Meta Flow in Task-Level and Instruction-Level Design Technology Research for Multi-Media Applications (hereinafter the "Catthoor").

Applicant respectfully submits that at least one limitation from each of the above-listed claims, as amended, is not taught or suggest by Catthoor. Applicant respectfully submits that a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described in a single prior art reference. *See* M.P.E.P. § 2131. For the reasons discussed below, since Catthoor fails to teach or suggest at least limitation from each of these claims, Applicant respectfully submits that these claims are in condition for immediate allowance.

Claim 1

Independent Claim 1, as amended, recites among other limitations: "wherein the task concurrency optimized system-level description further includes a description of a real-time operating system that uses the Pareto task optimization information." Applicant respectfully submits that at least this limitation is not by Catthoor. In the Office Action, the Examiner took the position that this limitation was described in § 2.1 and Figure 2 of Catthoor. Applicant respectfully submits that § 2.1 and figure 2 of Catthoor generally describe a design meta flow. Applicant respectfully submits that the cited sections fail to suggest providing a task concurrency optimized system level description that includes a real-time operating system. Furthermore, the cited section fails to teach or suggest that the real-time operating system use Pareto task optimization information during operation.

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### Claim 3

Independent Claim 3, as amended, recites among other limitations: "generating a description of the functionality and timing of the digital system, wherein the description includes a grey-box system-level description comprising a plurality of tasks, and wherein the grey-box system level description comprises a multi-thread graph for inter-task descriptions and a control data flow graph for intra-task descriptions." In the Office Action, the Examiner took the position that this limitation was described in Figure 2, Tasks 1-3 of Catthoor. As discussed above, Applicant respectfully submits that Figure 2 of Catthoor generally describes a design meta flow. Applicant respectfully submits that the cited sections fail to suggest providing a grey-box system-level description comprising a plurality of tasks, and wherein the grey-box system level description comprises a multi-thread graph for inter-task descriptions and a control data flow graph for intra-task descriptions. Since Catthoor fails to teach or suggest at least this limitation, Applicant respectfully submits that this claim is in condition for allowance.

### Claims 4-10

Since Claims 4-10 each depend on Claim 3, Applicant respectfully submits that these claims are allowable for at least the reasons discussed above and the subject matter of their own limitations.

### Discussion of New Claims

By this paper, Applicant has presented new Claims 15-20. Applicant respectfully submits that these new claims are directed to patentable subject matter. New Claim 20 is Claim 12 (allowable) rewritten into independent form including base Claim 3.

### Conclusion

Applicant has endeavored to address all of the Examiner's concerns as expressed in the outstanding Office Action. Accordingly, amendments to the claims for patentability purposes, the reasons therefore, and arguments in support of the patentability of the pending claim set are presented above. Any claim amendments which are not specifically discussed in the above remarks are not made for patentability purposes, and the claims would satisfy the statutory


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requirements for patentability without the entry of such amendments. In addition, such amendments do not narrow the scope of the claims. Rather, these amendments have only been made to increase claim readability, to improve grammar, and to reduce the time and effort required of those in the art to clearly understand the scope of the claim language. In light of the above amendments and remarks, reconsideration and withdrawal of the outstanding rejections is specifically requested. If the Examiner has any questions which may be answered by telephone, he is invited to call the undersigned directly.

Respectfully submitted,

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